TESTS RESULTS ON AGGREGATE IMPACT VALUE
(IS:2386 Part IV)

Lab ID : CP-RW-2017-04-13-01 **Date: 17-04-17**

Customer : Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.

Address : Yelahanka Satellite Sub Division, BBMP, Bangalore.

Project Name : Asphalting to Roads and improvements to drains in Muneshwara Layout 1st Main and cross roads of Attur Ward No.03

Agency : Technical Manager(West), KRIDL, BBMP, Bangalore.

Customer Reference : BBMP/EE(YNK.D)/W.O/142/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 13-04-17

Sample ID No : 2017-04-13-01/01

Type of Mix : Coarse Aggregate for BC (Bituminous Concrete)

Date of test : 13-04-17

Sl.No	Particulars of observations	Index	TEST 1	TEST 2
1	Total weight of the surface dry sample sample (passing 12.5 mm and retained on 10mm sieve)	A	315	315
2	Weight of fraction passing 2.36mm sieve After giving 15 blows	B	72.1	64.9
3	weight of fraction retained 2.36mm sieve After giving 15 blows	C	242.6	249.2
4	Total weight of (B+C) is less than the initial weight (Weight A) by more than one gram the result shall be discarded and a fresh test made.	A-(B+C)	0.3	0.9
5	Aggregate impct value	(B/A)*100	22.89	20.60
6	Aggregate impct value (Mean of two tests)		21.75	

Note:-

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Prepared By:
Harshitha

AE-03

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TESTS RESULTS ON STABILITY OF MIX

Lab ID	:	**CP-RW-2017-04-13-01**	**Date: 17-04-17**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.	
Address	:	Yelahanka Satellite Sub Division, BBMP, Bangalore.	
Project Name	:	Asphalting to Roads and improvements to drains in Muneshwara Layout 1st Main and cross roads of Attur Ward No.03	
Agency	:	Technical Manager(West), KRIDL, BBMP, Bangalore.	
Customer Reference	:	BBMP/EE(YNK.D)/W.O/142/2017-18	
Source of Sample	:	Hot Mix Plant, Bangalore	
Sample Condition	:	Satisfactory	
Date of Receipt	:	13-04-17	
Sample ID No	:	2017-04-13-01/01	
Type of Mix	:	BC (Bituminous Concrete)	
Date of test	:		

The results of the tests conducted on the Bituminous Concrete mix sample are as follow

Sl.No	Particulars of observations	TEST 1	TEST 2	Secified limits as per MORTH specification table 500-11
1	Marshal Stability at 60°C, KN	11.65	11.43	10KN(min)
2	Marshal flow at 60°C, mm	3.22	3.16	2-4
3	Percent air Voids	4.57	4.18	3-5
4	Percent Voids in mineral Aggregate(VMA %)	14.58	14.54	13-15
5	Percent Voids filled with Bitumen(VFB %)	72.18	73.16	65-75
6	Density, g/cc	2.32	2.34	–

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Prepared By:
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TEST REPORT OF AGGEGRATE STRIPPING VALUE OF ROAD AGGRGATE (IS:6241)

Lab ID	:	**CP-RW-2017-04-13-01** **Date: 17-04-17**
Customer	:	Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.
Address	:	Yelahanka Satellite Sub Division, BBMP, Bangalore.
Project Name	:	Asphalting to Roads and improvements to drains in Muneshwara Layout 1st Main and cross roads of Attur Ward No.03
Agency	:	Technical Manager(West), KRIDL, BBMP, Bangalore.
Customer Reference	:	BBMP/EE(YNK.D)/W.O/142/2017-18
Source of Sample	:	Sample supplied by Agency
Sample Condition	:	Satisfactory
Date of Receipt	:	13-04-17
Sample ID No	:	2017-04-13-01/01
Type of Mix	:	BC (Bituminous Concrete)
Date of test	:	13-04-17

Type of Binder	:	60/70
% of Binder Used	:	5.0%
Weight of Aggregate	:	200.0 gm
Weight of Binder	:	10.0 gm
Temperature of water bath	:	40°C

No of test	Retained Stripping Percentage	Stripping Percentage	Average Retained Stripping Percentage	Secified limits as per MORTH specification table 500-8
1	99.0	1.0	98.5	Minimum Retained Coating 95%
2	98.0	2.0		
3	98.5	1.5		

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TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2007)

Lab ID : CP-RW-2017-04-13-01

Customer : Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore. **Date: 17-04-17**

Address : Yelahanka Satellite Sub Division, BBMP, Bangalore.

Project Name : Asphalting to Roads and improvements to drains in Muneshwara Layout 1st Main and cross roads of Attur Ward No.03

Agency : Technical Manager(West), KRIDL, BBMP, Bangalore.

Customer Reference : BBMP/EE(YNK.D)/W.O/142/2017-18

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 13-04-17

Sample ID No : 2017-04-13-01/01

Type of Mix : BC-Plant (Bituminous Concrete)

Date of test : 13-04-17

Oven Dry Weight(gm) : 5000

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-17(grading-2)
19	0	0	0.0	100.0	100
13.2	68	68	1.4	98.6	90-100
9.5	797	865	17.3	82.7	70-88
4.75	981	1846	36.9	63.1	53-71
2.36	629	2475	49.5	50.5	42-58
1.18	512	2987	59.7	40.3	34-48
0.6	518	3505	70.1	29.9	26-38
0.3	454	3959	79.2	20.8	18-28
0.15	258	4217	84.3	15.7	12-20
0.075	341	4558	91.2	8.8	4-10
PAN	442	5000	100	0.0	0

Note:
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Page 1/1
End of Report

TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2011)

Lab ID : **CP-RW-2017-04-22-01** **Date: 24-04-17**

Customer : Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.

Address : Yelahanka Satellite Sub Division, BBMP, Bangalore.

Project Name : Asphalting to Roads and improvements to drains in Muneshwara Layout 1st Main and cross roads of Attur Ward No.03

Agency : Technical Manager(West), KRIDL, BBMP, Bangalore.

Customer Reference : BBMP/EE(YNK.D)/W.O/142/2017-18

Source of Sample : Sample supplied by Agency

Date of Receipt : 22-04-17

Sample ID No : 2017-04-22-01/01

Type of Mix : BC (Bituminous Concrete)

Date of test : 16-02-17

Sl.no	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	A	503	502
2	Weight of the sample After extraction	B	475	474
3	Bitumen percentage	$\frac{A-B}{A} \times 100$	5.57	5.58
4	Average percentage	%	5.6	

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Lab ID : CP-RW-2017-04-22-01 **Date: 24-04-17**

Sample ID : 2017-04-22-01/01

AFTER EXTRACTION - Trail-1

Total Weight of the Sample(gm) : 475

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	2	2	0.4	99.6	90-100
9.5	65	67	14.1	85.9	70-88
4.75	114	181	38.1	61.9	53-71
2.36	85	266	56.0	44.0	42-58
1.18	27	293	61.7	38.3	34-48
0.6	13	306	64.4	35.6	26-38
0.3	54	360	75.8	24.2	18-28
0.15	35	395	83.2	16.8	12-20
0.075	55	450	94.7	5.3	4-10

AFTER EXTRACTION - Trail-2

Total Weight of the Sample(gm) : 474

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	1	1	0.2	99.8	90-100
9.5	64	65	13.7	86.3	70-88
4.75	118	183	38.6	61.4	53-71
2.36	84	267	56.3	43.7	42-58
1.18	29	296	62.4	37.6	34-48
0.6	11	307	64.8	35.2	26-38
0.3	56	363	76.6	23.4	18-28
0.15	37	400	84.4	15.6	12-20
0.075	52	452	95.4	4.6	4-10

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TEST RESULTS OF GRADATION FOR BC
IS 2386 (Part 1) 1963 (RA 2011)

Lab ID : **CP-RW-2017-04-22-02** **Date: 24-04-17**

Customer : Assistant Executive Engineer, Yelahanka Satellite Sub Division, BBMP, Bangalore.

Address : Yelahanka Satellite Sub Division, BBMP, Bangalore.

Project Name : Asphalting to Roads and improvements to drains in Muneshwara Layout 1st Main and cross roads of Attur Ward No.03

Agency : Technical Manager(West), KRIDL, BBMP, Bangalore.

Customer Reference : BBMP/EE(YNK.D)/W.O/142/2017-18

Source of Sample : Sample supplied by Agency

Date of Receipt : 22-04-17

Sample ID No : 2017-04-22-02/01

Type of Mix : BC (Bituminous Concrete)

Date of test : 16-02-17

Sl.no	Description	Index	Trail 1	Trail 2
1	Weight of the Sample	A	500	500
2	Weight of the sample After extraction	B	472	471
3	Bitumen percentage	$\frac{A-B}{A} \times 100$	5.60	5.80
4	Average percentage	%	5.7	

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Lab ID : CP-RW-2017-04-22-02
Sample ID : 2017-04-22-02/01
Date: 24-04-17

AFTER EXTRACTION - Trail-1

Total Weight of the Sample(gm) : 472

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	10	10	2.1	97.9	90-100
9.5	55	65	13.8	86.2	70-88
4.75	145	210	44.5	55.5	53-71
2.36	58	268	56.8	43.2	42-58
1.18	31	299	63.3	36.7	34-48
0.6	15	314	66.5	33.5	26-38
0.3	58	372	78.8	21.2	18-28
0.15	32	404	85.6	14.4	12-20
0.075	26	430	91.1	8.9	4-10

AFTER EXTRACTION - Trail-2

Total Weight of the Sample(gm) : 471

IS Sieve Size (mm)	Weight Retained (gm)	Comulative Weight Retained (gm)	Comulative % of Retained	Comulative % of Passing	Secified limits as per MORTH specification table 500-23(grading-2)
19	0	0	0.0	100.0	100
13.2	8	8	1.7	98.3	90-100
9.5	52	60	12.7	87.3	70-88
4.75	139	199	42.3	57.7	53-71
2.36	61	260	55.2	44.8	42-58
1.18	29	289	61.4	38.6	34-48
0.6	19	308	65.4	34.6	26-38
0.3	62	370	78.6	21.4	18-28
0.15	31	401	85.1	14.9	12-20
0.075	29	430	91.3	8.7	4-10

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